

AMENDMENTS TO THE CLAIMS

Please add or amend the claims to read as follows, and cancel without prejudice or disclaimer to resubmission in a divisional or continuation application claims indicated as cancelled. The listing of claims will replace all prior versions, and listing of claims in the application.

Listing of Claims

1. (Currently amended) A method for building three-dimensional objects, said method comprising:

dispensing a first material used to form at least one ~~the~~ three-dimensional object and at least part of a support structure; and

dispensing a second material used to form at least part of a the support structure [[:]] and ~~dispensing~~ a release layer between said three-dimensional ~~3-D~~ object and said support structure, said second material being at least partly liquid or paste after curing,

wherein said support structure is self-supporting and comprises at least one pillar of said first material dispensed within said second material, said pillar not being in contact with said three-dimensional object.

2. (Original) The method of claim 1 wherein at least said first material is a photopolymer and at least the three-dimensional object is formed after being irradiated by electromagnetic radiation.

3. (Original) The method of claim 1 wherein said second material is a photopolymer and the support structure is formed after being irradiated by electromagnetic radiation.

4. (Previously presented) The method of claim 1 wherein said release layer is a photopolymer and is formed after being irradiated by electromagnetic radiation.

5.-7. (Cancelled)

APPLICANT(S): KRITCHMAN, Eliahu M. et al.
SERIAL NO.: 10/716,426
FILED: November 20, 2003
Page 4

8. (Currently amended) The method of claim 1 comprising separating said support structure and release layer from said ~~3-D~~ three-dimensional object ~~thereby to produce a three-dimensional object comprised of said first material.~~

9. (Currently amended) The method according to claim ~~1-8~~ 1 comprising subjecting said ~~second material~~ support structure and release layer to a solvent ~~or to radiation thereby to cause~~ causing the support structure and release layer to weaken.

10. (Cancelled).

11. (Currently amended) The method according to claim 1, where said support structure further comprises a container formed of said first material, said container being capable of confining said second material.

12. (Cancelled).

13. (Currently Amended) The method according to claim ~~12~~ 1, further comprising constructing at least one connecting membrane of ~~said~~ first material attached to ~~said~~ at least one support said pillar.

14. - 20. (Cancelled)

21. (Currently Amended) A method for building three-dimensional objects, said method comprising:

dispensing a curable build material to form ~~the 3-D~~ a three-dimensional object and at least part of a support structure;

dispensing a support material to form at least part of [a] the support structure, the build material being solid after curing and the support material being at least partly liquid after curing; and

APPLICANT(S): KRITCHMAN, Eliahu M. et al.
SERIAL NO.: 10/716,426
FILED: November 20, 2003
Page 5

selectively dispensing [[a]] the build material to form a container capable of holding said support material, said container and said support material comprising a support structure for said three-dimensional object.

22. (Original) The method according to claim 21, wherein said container comprises a base, a plurality of walls and an open top.

23. (Currently amended) The method according to claim 22, wherein said container comprises at least one nib projecting from at least one of said walls, wherein said at least one nib is capable of restraining the movement of [[a]] the three-dimensional object.

24. (Currently amended) The method according to claim 21, wherein said ~~container~~ support structure comprises a mixture of said build material and said support material within said container.

25. (Currently amended) The method according to claim 21, wherein each of said build material, support material and container are ~~formed~~ dispensed in layers.

26. - 30. (Cancelled)

31. (Currently amended) A method for building three-dimensional objects, said method comprising:

dispensing a build material to form a three-dimensional object; and

dispensing [[a]] the build material and a ~~second~~ support material which in combination form a support structure, said support structure comprising a plurality of fine pillars which are not in contact with said three-dimensional object, said pillars being surrounded by said ~~second~~ support material and separated from said three-dimensional object by a release layer of said support material.

APPLICANT(S): KRITCHMAN, Eliahu M. et al.
SERIAL NO.: 10/716,426
FILED: November 20, 2003
Page 6

32. (Currently amended) The method according to claim 31, further comprising constructing membranes of said build material or a combination of said build material and said support material ~~connected to~~ between said support pillars ~~pillar~~.

33. (Currently amended) The method according to claim 31, wherein ~~said~~ at least one of said pillars ~~support pillar~~ is comprised of said build material.

34. (Currently amended) The method according to claim 31, wherein ~~said~~ at least one of said pillars ~~support pillar~~ is comprised of said build material and said second material.

35. (Currently amended) The method according to claim 31, wherein ~~said~~ at least one of said pillars ~~support pillar~~ comprises a plurality of layers and wherein ~~the~~ a topmost layer of said at least one ~~support pillar~~ is adjacent to ~~[[an]]~~ the three-dimensional object being supported.

36. (Currently amended) The method according to claim 31, wherein ~~said~~ an upper portion of ~~said~~ at least one ~~support pillar~~ of said pillars is tapered.

37. (Original) The method according to claim 31, wherein ~~each of~~ said build material, said support ~~second~~ material and ~~pillar~~ said pillars are deposited in layers.

38. (Currently amended) The method according to claim 31, wherein ~~the~~ a topmost layer of ~~said~~ at least one ~~support pillar~~ of said pillars comprises said second material.

39. (Currently amended) The method according to claim 31, wherein ~~the~~ a topmost layer of ~~said~~ at least one ~~support pillar~~ of said pillars comprises a third material, said third material being softer than the material forming the remainder of said at least one ~~support pillar~~.

40. - 60. (Cancelled)